AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes;

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of the intermediate insulating film; [[and]]

wherein the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said at least one impurity region; and

wherein the high concentration impurity region is provided as being surrounded by the low concentration impurity region and the intermediate concentration impurity region, or surrounded only by the low concentration impurity region.

2. (Original) A semiconductor device as set forth in claim 1, further comprising conductive layers respectively provided on at least one of the first electrode and the second electrode, and on the high concentration impurity region.

3. (Previously presented) A semiconductor device as set forth in claim 2, wherein the conductive layers comprise silicide.

4. (Original) A semiconductor device as set forth in claim 1, further comprising sidewall insulation films provided on at least one of the side walls of the first electrode and the second electrode.

5. (Original) A semiconductor device as set forth in claim 1, wherein the pair of impurity regions of the second conductivity type each include the low concentration impurity region, the intermediate concentration impurity region and the high

concentration impurity region sequentially arranged in this order from the region located underneath the first electrode.

6. (Original) A semiconductor device as set forth in claim 1, wherein the intermediate concentration impurity region is provided only in a surface portion of the semiconductor substrate, or extend from the surface portion of the semiconductor substrate to the inside of the substrate as surrounding the high concentration impurity region, or as being partly or entirely surrounded by the low concentration impurity region.

7. (Canceled)

8. (Original) A semiconductor device as set forth in claim 1, wherein the low concentration impurity region has an impurity concentration on the order of 10^{18} ions/cm^3, the intermediate concentration impurity region has an impurity concentration on the order of 1×10^{18} to 10^{19} ions/cm^3, and the high concentration impurity region has an impurity concentration on the order of 1×10^{20} to 10^{21} ions/cm^3.

9. (Original) A semiconductor device as set forth in claim 1, wherein the low concentration impurity region is disposed at a depth of 100 to 600 nm, the intermediate concentration impurity is disposed at a depth of about 100 to about 600 nm, and the high

concentration impurity region is disposed at a depth of about 100 to about 400 nm as measured from the surface of the semiconductor substrate.

10. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes;

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of the intermediate insulating film;

wherein the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said at least one impurity region; and

~~A semiconductor device as set forth in claim 1,~~ wherein the first electrode has a greater thickness than the second electrode.

11. (Currently amended) A semiconductor device as set forth in claim 1, wherein the second electrode entirely covers the first electrode and further extends to one side or opposite sides of the first electrode on the semiconductor substrate~~, or disposed only on the first electrode having a smaller size than the first electrode~~.

12. (Original) A semiconductor device as set forth in claim 1, wherein the first electrode and the second electrode serve as a floating gate electrode and a control gate electrode, respectively, of a memory transistor.

13-17. (Canceled)

18. (Previously presented) The semiconductor device of claim 1, wherein the second electrode is a gate electrode and extends laterally beyond an edge of the first electrode.

19. (Canceled)

20. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes along a horizontal direction of the semiconductor substrate; [[and]]

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of at least the intermediate insulating film; and

wherein the high concentration impurity region is provided as being surrounded by the low concentration impurity region and the intermediate concentration impurity region, or surrounded only by the low concentration impurity region.

21. (Canceled)

22. (Previously presented) The semiconductor device of claim 1, wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode overlaps each of the first electrode and at least part of said low concentration impurity region and said intermediate concentration impurity region of at least one of said impurity regions of the second conductivity type.

23. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes;

wherein an overlapping width of the first electrode and a first one of said pair of impurity regions of the second conductivity type is different than an overlapping width of the first electrode and a second one of said pair of impurity regions of the second conductivity type; [[and]]

wherein the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said at least one impurity region; and

wherein the high concentration impurity region is provided as being surrounded by the low concentration impurity region and the intermediate concentration impurity region, or surrounded only by the low concentration impurity region.

24. (Previously presented) The semiconductor device of claim 1, wherein a distance from (a) an edge of the high concentration impurity region closest to the first electrode to (b) an edge of the intermediate concentration impurity region closest to the first electrode in a first one of said pair of impurity regions of the second conductivity type is different from the corresponding distance from (a) to (b) in a second of said pair of impurity regions of the second conductivity type.

25. (Previously presented) The semiconductor device of claim 20, wherein a distance from (a) an edge of the high concentration impurity region closest to the first electrode to (b) an edge of the intermediate concentration impurity region closest to the first electrode in a first one of said pair of impurity regions of the second conductivity type is different from the corresponding distance from (a) to (b) in a second of said pair of impurity regions of the second conductivity type.

26. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order;

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of the intermediate insulating film; [[and]]

wherein the high concentration impurity region is spaced apart from the low concentration impurity region in said at least one impurity region; and

wherein the high concentration impurity region is provided as being surrounded by the low concentration impurity region and the intermediate concentration impurity region.

27. (Currently amended) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in said one impurity region in this order from a region located underneath at least one of the first and second electrodes; [[and]]

wherein the entirety of the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said one impurity region so that the high and low concentration impurity regions are each provided in the same impurity region; and

wherein the high concentration impurity region is provided as being surrounded by the low concentration impurity region and the intermediate concentration impurity region, or surrounded only by the low concentration impurity region.

28. (New) The semiconductor device of claim 26, wherein a distance from (a) an edge of the high concentration impurity region closest to the first electrode to (b) an edge

of the intermediate concentration impurity region closest to the first electrode in a first one of said pair of impurity regions of the second conductivity type is different from the corresponding distance from (a) to (b) in a second of said pair of impurity regions of the second conductivity type.

29. (New) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes along a horizontal direction of the semiconductor substrate;

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of at least the intermediate insulating film; and

wherein the first electrode has a greater thickness than the second electrode.

30. (New) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order from a region located underneath at least one of the first and second electrodes;

wherein an overlapping width of the first electrode and a first one of said pair of impurity regions of the second conductivity type is different than an overlapping width of the first electrode and a second one of said pair of impurity regions of the second conductivity type;

wherein the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said at least one impurity region; and

wherein the first electrode has a greater thickness than the second electrode.

31. (New) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in this order;

wherein the second electrode extends laterally beyond an edge of the first electrode so that the second electrode is provided over both the first electrode and at least part of at least one of the impurity regions with intervention of the intermediate insulating film;

wherein the high concentration impurity region is spaced apart from the low concentration impurity region in said at least one impurity region; and

wherein the first electrode has a greater thickness than the second electrode.

32. (New) A semiconductor device comprising:

a semiconductor substrate of a first conductivity type;

a first electrode provided on the semiconductor substrate with the intervention of a gate insulation film;

a second electrode provided at least on the first electrode with the intervention of an intermediate insulation film;

at least a pair of impurity regions of a second conductivity type provided in a spaced relation in the semiconductor substrate, at least one of the impurity regions comprising a low concentration impurity region, an intermediate concentration impurity region and a high concentration impurity region sequentially arranged in said one impurity region in this order from a region located underneath at least one of the first and second electrodes;

wherein the entirety of the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in said one impurity region so that the high and low concentration impurity regions are each provided in the same impurity region; and

wherein the first electrode has a greater thickness than the second electrode.